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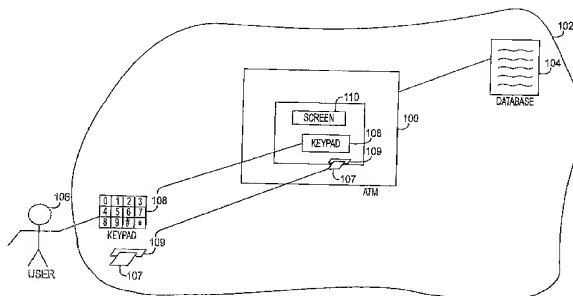
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(54) Title: ELECTRONIC TRANSACTION SYSTEMS AND METHODS THEREFOR



(57) **Abstract:** A method and apparatus are disclosed for approving a transaction request between an electronic transaction system and a portable electronic authorization device (PEAD) carried by a user using an electronic service authorization token. The method includes the steps of receiving at the PEAD first digital data representing the transaction request. The PEAD provides information to the user regarding an ability to approve the transaction request. When the transaction request is approved by the user, the PEAD receives second digital data representing the electronic service authorization token. In one aspect of the invention, the method and apparatus include a remote agent server that provides a bridge between the electronic transaction system and the PEAD. In an embodiment providing a further level of security, the private key is stored on the portable device, encrypted. The decryption key is stored outside of the device, at a trusted 3rd party location. When the user attempts to make a signature the software sends a request for the decryption key, along with the user's password or pass phrase keyed in at the keyboard of the PDA, smart phone, or cell phone, to a server belonging to the trusted 3rd party. This password is usually, but not always, different than the password stored in the PEAD. The server checks the password or pass phrase and, if it is correct sends the decryption key to the portable device, where it is used once and immediately discarded. In yet another aspect of the invention, the user's password is securely encoded in the method and apparatus and are used at a point-of-sale location. Advantages of the invention include the ability to securely and conveniently perform transactions in a portable device.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G07F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 5 917 913 A (WANG YNJIUN PAUL) 29 June 1999 (1999-06-29) cited in the application column 6, line 22 - line 67 column 7, line 53 - column 6, line 64 figures 2-4	1, 2
A	ASOKAN N ET AL: "AUTHENTICATING PUBLIC TERMINALS" COMPUTER NETWORKS AND ISDN SYSTEMS, NORTH HOLLAND PUBLISHING. AMSTERDAM, NL, vol. 31, no. 8, 23 April 1999 (1999-04-23), pages 861-870, XP000700285 ISSN: 0169-7552 paragraph '03.1!; figure 1 --- -/--	1-5, 16-18

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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